OPENING STATEMENT OF
THE HONORABLE VERNON EHLERS
CHAIRMAN
SUBCOMMITTEE ON ENVIRONMENT, TECHNOLOGY, AND STANDARDS
COMMITTEE ON SCIENCE
U.S. HOUSE OF REPRESENTATIVES

"Views of the NIST Nobel Laureates on Science Policy"

Wednesday, May 24, 2005
9:30-11:30 a.m.
2318 Rayburn House Office Building

Good morning, and welcome to today's hearing, entitled "Views of the NIST Nobel Laureates on Science Policy." It is my great privilege to chair the Science subcommittee that oversees the National Institute of Standards and Technology, also known as NIST. This gives me the opportunity to hold hearings such as this one, where we can highlight some of the best science being done in the world today by U.S. researchers at a humble federal science agency. NIST has become the world leader in standards by employing superb scientists who do excellent work; nothing more clearly demonstrates the phenomenal quality of the Agency's work than the three Nobel laureates NIST has produced in less than ten years, a truly remarkable accomplishment.

Having been a physicist myself, I have some understanding of how difficult your job can be: science is hard work. I think the public understands in an abstract way that if you win the Nobel Prize you must be very smart. But what people frequently do not think about and do not appreciate is the incredible amount of time, effort, and often frustration that goes into a successful, or even unsuccessful, scientific experiment. Optical and low-temperature physics in particular are fields where everything has to work perfectly, the margins for error are very tiny, the precision required is sublime, and experiments that work well in theory take months or years – time that is more often than not fraught with setbacks and frustrations – to produce a result in the laboratory. It takes true dedication and tenacity to push back the frontiers of science the way you have, and I think everyone here stands in awe of your achievements.

We are not here today just to learn about your research. In 1945 Vannevar Bush, Director of the Office of Scientific Research and Development, laid out a bold new vision for science in this country in the book "Science: the Endless Frontier." The publication of this historic document resulted in the creation of the National Science Foundation, and launched a new era in U.S. scientific research. In 1998, I, together with House Speaker Newt Gingrich, released "Unlocking the Future: Towards a New Science Policy," a document that was intended to guide the development of a long-term science and technology policy for the United States. These policy documents are important because they help us take a long view of the critical role of science in our society and they force us to organize and update our science priorities. Now we are once again due for an update.

As leading scientists in your fields, we look forward to hearing your perspectives. You are products of the U.S. education system and have benefited from federal support for scientific

research. The Science Committee is interested in learning your opinions about how the U.S. can improve its education and research systems so that we will continue to be at the cutting edge of science and winning Nobel Prizes in the future.

I am pleased to welcome Dr. William Phillips, Dr. Eric Cornell, and my former colleague Dr. Jan Hall, the three Nobel laureates in physics from NIST as our witnesses today.